Minutes, 10/08/03 Tevatron BPM Upgrade Meeting Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

- 1. Report from Steve and Bob.
- 2. Reports from L2 managers.
- 3. AOB.

1. Bob and Steve:

- Today there is a DOE mini-review of the Run 2 project. There is nothing specific for the Tevatron BPM project except for the update we sent to Jeff.
- Steve showed the (rather rough) budget request that was sent by Jim, Bob and Steve to Vladimir Shiltsev. This was done to satisfy the request for a budget for FY04 for the Tevatron Upgrade project. The request consists of:
 - Tunnel work (but no new cables)
 - Test stand(s)
 - Electronics, crates, power supplies, etc.

We will refine and correct these estimates as we reach agreement on what we plan to build.

2. Subproject Leader Reports:

Jim Steimel:

- Jim discussed his current calculations/specifications for an analog filter for the BPM. Rather than try to reword his argument in my own I will point to his transparencies, found in the Beams Doc DB doc number 872.
- There was a long and useful discussion of filtering, timing, turn-by-turn measurements, single bunch one-turn measurements, closed orbit measurements, single-bunch measurements, etc. It was a useful discussion for many of us and helped to clarify what we are trying to measure and how we intend to go about making that measurement.

Rob Kutschke mentioned that he is working on "cartoons" to illustrate how signals are seen by the system, bunch structure, timing, etc. He wants to give a talk to this group showing this in the next week. Mail will be sent out to all when the talk is scheduled.

Mike Martens:

- Nothing to report this week.

Margaret Votava:

- Margaret and Brian and a few others are working on a draft about the software and data structures for the BPM readout into ACNET/controls system. They will put these into the document database and inform everyone. People should examine these and feed back to Margaret and Brian.
- Margaret is working on a test stand for working on the online and DAQ, including ACNET and MOOC. The equipment exists but there are still some questions about whether the teststand needs to be in the BD network or whether it can live over at Feynman.

Brian Hendricks:

- Working with Margaret on data formats, etc.

Vince Pavlicek:

- Bill Haynes is working on the BLM project. A future presentation will detail the plans and status.

Rob Kutschke:

- Rob is planning to work on a project, along with Valeri Lebedev. This is meant to give Rob the opportunity to work on a real project, using BPMs, the controls system, console applications, either VAX or JAVA applications, etc.

This led to an interesting discussion the specific project and its merits, most of which is internal to Beams Division. The important thing for the Tevatron BPM upgrade project is that Rob will spend time learning what is needed for the Tevatron BPM project.

- Rob has talked to Eric James about getting Eric's data from the damper board (MATLAB format). Rob will make those available and send instructions.
- Rob also talked about his cartoon talk as well as some useful timing information about proton and antiproton bunches at any and all BPMs. He will show these and insert documents into the Beams Doc DB.

3. AOB.

- Tunnel work proceeds. An update from Fritz will be sent out separately.
- Next week's meetings include a Monday meeting to discuss damper boards and Wednesday either to continue the discussion and/or a project meeting.